PERSONAL EXPENSE TRACKER APPLICATION

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In partial fulfilment for the award of the degree

Of

BACHELOR OF TECHNOLOGY

IN

DEPARTMENT OF INFORMATION TECHNOLOGY



ST.XAVIER'S CATHOLIC COLLEGE OF ENGINEERING, CHUNKANKADAI

ANNA UNIVERSITY: CHENNAI 600 025
DECEMBER 2022

BONAFIDE CERTIFICATE

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Submitted for B.TECH Degree Viva-Voce held at St.Xavier's Catholic College Of Engineering on2022

INTERNAL EXAMINER

EXTERNAL EXAMINER

ACKNOWLEDGEMENT

First of all we praise the **almighty God** for this presence and abundant grace in giving us knowledge, wisdom and strength to take up this mini project and complete it on time. We express our gratitude to **our Parents** who have been the major contribution of inspiration and encouragement to us throughout our career.

We would like to deliver our heartiest gratitude to our correspondent **Rev.Fr.Dr.M.Maria William**, for making facilities for the successful completion of our work. We express our sincere thanks to our principal **Dr.J.Maheswaran,M.E.,Ph.D.**, for giving us spontaneous and wholehearted encouragement for completing our project successfully.

We are especially indebted to our Head Of the Department **Dr.G.Sahaya Stalin Jose, Ph.D.**, for her keen support to do our project work successfully.

We convey our deepest gratitude to our project faculty member, **Mrs T.M. Angelin Monisha Sharean.B.E,M.E.** for her motivation and guidance and also all the other staff members of our department for their timely suggestions to complete the project.

Last but not least we would like to thank our friends for their valuable contribution towards this project. We shall gratefully acknowledge all suggestions received for further improvement in the project.

ABSTRACT

Your savings rate is one of the strongest indicators of financial health. Monarch makes it easy to track your savings rate every month, and view your historical spending. You can use our default category system, or customize it to fit your unique needs. Whatever you like! Know exactly how much money you save each month so you can put it toward your financial goals. You can view your spending by merchant to see where you're spending the majority of your money. Personal Expense Tracker (PET) is a daily expense management system which is specially designed for non-salaried and salaried personnel for keeping track of their daily expenditure with easy and effective way through computerized system which tends to eliminate manual paper works. It will also manage records in systematic way and user can access the stored data conveniently. We have tried to design the project in such way that user may not have any difficulty in using this application without much effort. This software can be really used by end user who have Android running devices with them. The language that we use to develop this system is Java and SQLite for database.

INTRODUCTION

CLOUD APPLICATION:

A cloud application, or cloud app, is a software program where cloud-based and local components work together. This model relies on remote servers for processing logic that is accessed through a web browser with a continual internet connection.

Cloud application servers typically are located in a remote data center operated by a third-party cloud services infrastructure provider. Cloud-based application tasks may encompass email, file storage and sharing, order entry, inventory management, word processing, customer relationship management (CRM), data collection, or financial accounting features.

A cloud application simply refers to any software application that is deployed in a cloud environment rather than being hosted on a local server or machine. The term "cloud environment" describes how an IT organization has configured its IT infrastructure to support cloud applications. There are three different models that are popular today.

BENEFITS OF CLOUD APPS:

Cloud applications can be updated, tested and deployed quickly, providing enterprises with fast time to market and agility. This speed can lead to culture shifts in business operations.

Third-party data sources and storage services can be accessed withan application programming interface (API). Cloud applications can be kept smaller by using APIs to hand data to applications or API-based back-end services for processing or analytics computations, with the results handed back to the cloud application. Vetted APIs impose passive consistency that can speed development and yield predictable results.

The size and scale of data centers run by major cloud infrastructure and service providers, along with competition among providers, has led to lower prices. Cloud-based applications can be less expensive to operate and maintain than equivalent on-premises installations.

Data stored on cloud services is instantly available to authorized users. Due to their massive scale, cloud providers can hire world-class security experts and implement infrastructure security measures that typically only large enterprises can obtain. Centralized data managed by IT operations personnel is more easily backed up on a regular schedule and restored should disaster recovery become necessary.

HOW CLOUD APP WORKS?

Data is stored and compute cycles occur in a remote data center typically operated by a third-party company. A back end ensures uptime, security and integration and supports multiple access methods.

Cloud applications provide quick responsiveness and don't need to permanently reside on the local device. They can function offline, but can be updated online.

While under constant control, cloud applications don't always consume storage space on a computer or communications device. Assuming a

reasonably fast internet connection, a well-written cloud application offers all the interactivity of a desktop application, along with the portability of a web application.

APPLICATIONS OF CLOUD COMPUTING IN REAL WORLD:

Cloud Service Providers (CSP) are providing many types of cloud services and now if we still cloud computing has touched every sector by providing various cloud applications. Sharing and managing resources is easy in cloud computing that's why it is one of the dominant fields of computing. These properties have made it an active component in many fields. Now let's know some of the real- world applications of cloud computing.

ONLINE DATA STORAGE:

Cloud computing allows storing data like files, images, audios, and videos, etc on the cloud storage. The organization need not set physical storage systems to store a huge volume of business data which costs so high nowadays. As they are growing technologically, data generation is also growing with respect to time, and storing that becoming problem. In that situation, Cloud storage is providing this service to store and access data any time as per requirement.

BACKUP AND RECOVERY:

Cloud vendors provide security from their side by storing safe to the data as well as providing a backup facility to the data. They offer various recovery application for retrieving the lost data. In the traditional way backup of data is a very complex problem and also it is very difficult sometimes impossible to recoverthe lost data. But cloud computing has made backup and recovery applications very easy where there is no fear of running out of backup media or loss of data.

BIG DATA ANALYSIS:

We know the volume of big data is so high where storing that in traditional data management system for an organization is impossible. But cloud computing has resolved that problem by allowing the organizations to store their large volume of data in cloud storage without worrying about physical storage. Next comes analyzing the raw data and finding out insights or useful information from it is a big challenge as it requires high-quality tools for data analytics. Cloud computing provides the biggest facility to organizations in terms of storing and analyzing big data.

TESTING AND DEVELOPMENT:

Setting up the platform for development and finally performing different types of testing to check the readiness of the product before delivery requires different types of IT resources and infrastructure. But Cloud computing provides the easiest approach for development as well as testing even if deployment by using their IT resources with minimal expenses. Organizations find it more helpful as they got scalable and flexible cloud services for product development, testing, and deployment.

E-COMMERCE APPLICATION:

Cloud-based e-commerce allows responding quickly to the opportunities which are emerging. Users respond quickly to the market opportunities as well as the traditional e-commerce responds to the challenges quickly. Cloud-based e-commerce gives a new approach to doing business with the minimum amount as well as minimum time possible. Customer data, product data, and other operational systems are managed in cloud environments.

CLOUD COMPUTING IN EDUCATION:

Cloud computing in the education sector brings an unbelievable change in learning by providing e-learning, online distance learning platforms, and student information portals to the students. It is a new trend in education that provides an attractive environment for learning, teaching, experimenting, etc to students, faculty members, and researchers. Everyone associated with the field can connect to the cloud of their organization and access data and information from there.

E-GOVERNANCE APPLICATION:

Cloud computing can provide its services to multiple activities conducted by the government. It can support the government to move from the traditional ways of management and service providers to an advanced way of everything by expanding the availability of the environment, making the environment more scalable and customized. It can help the government to reduce the unnecessary costin managing, installing, and upgrading applications and doing all these with help of could computing and utilizing that money public service.

CLOUD COMPUTING IN MEDICAL FIELDS:

In the medical field also nowadays cloud computing is used for storing and accessing the data as it allows to store data and access it through the internet without worrying about any physical setup. It facilitates easier access and distribution of information among the various medical professional and the individual patients. Similarly, with help of cloud computing offsite buildings and treatment facilities like labs, doctors making emergency house calls and ambulances information, etc can be easily accessed and updated remotely instead of having to wait until they can access a hospital computer.

LITERATURE SURVEY

1. Intuit Mint:

Mr.Aaron Patzer

Mint, also known as Intuit Mint and formerly known as Mint.com, is a personal financial management website and mobile app for the US and Canada produced by Intuit, Inc. (which also produces TurboTax, QuickBooks, and Credit Karma). Mint.com was originally created by Aaron Patzer and provided account aggregation through a deal with Yodlee, but switched to using Intuit's own system for connecting to accounts after it was purchased by Intuit in 2009. It was later renamed from "Mint.com".

Mint's primary service allows users to track bank, credit card, investment, and loan balances and transactions through a single user interface, as well as create budgets and set financial goals.

Most expense tracker apps can integrate with your bank and credit card accounts, just like Mint can. However, this app also helps you avoid late fees by notifying you of upcoming bill due dates. It will even notify you if your account balance is running low so you can avoid an overdraft fee, or if you're close to your credit card's limit.

Pros:

- Track investments and create savings goals
- Monitor your credit
- Connect accounts to categorize transactions

Cons:

- Not all banks allow Mint acces
- No receipt uploading
- Accounts sometimes need re-authorization to sync

2.GOOD BUDGET:

Mr.Chi Ming Chien

Allows users to plan their household's spending using the "envelope method," where they allocate a certain amount of their income into categories like groceries, rent and debt payoff. Users are only supposed spend what's in their envelopes and if they go beyond their budget the envelope will show red to indicate that they overspent.

No, users manually create "envelopes" and input their transactions. 256-bit bank grade encryption in a secure data center.

Free to use for creating 20 envelopes, one account user on up to two devices, one year of transaction history, debt tracking and community support. Envelope feature allows user to visualize their spending and prioritize meeting different goals. Users can customize the envelope categories according to their needs, such as saving for an emergency fund or a vacation.

Requiring manual entry of data helps users to really analyze their spending habits versus it being automated (users can also download their recent activity from their bank's website and import that into Goodbudget).

Pros:

- Security features include 256-bit bank grade encryption in a secure data center.
- App offers educational resources like a blog, a podcast and online courses people can take.

Cons:

- Requires that users use the "envelope method" to track their spending.
- Some user reviews report experiencing technical issues with the app.

3.EXPENSIFY:

Mr.David Barrett

Expensify is a software company that develops an expense management system for personal and business use. Expensify also offers a business credit card called the Expensify Card. Expensify was founded in 2008 by current CEO David Barrett. This app automatically scans, reads, and imports receipt details for you. It also works great for travel get trip reminders, flight delay notifications, and change notifications sent right to your phone.

When looking for an app for receipt saving, go with Expensify because its app automatically scans, reads, and imports receipt details for you. It also works great for travel—get trip reminders, flight delay notifications, and change notifications sent right to your phone.

Pros:

- Automatically reads and imports receipt details for you—even if it's foreign currency
- Categorize, tag, and group expenses into a report

• Automatic mileage tracking using GPS

Cons:

- Uploading PDF receipts can be difficult to do
- Automatic receipt reading sometimes takes longer than it would to manually type in the info.

4. Intuit Quickbooks:

Mr.Scott Cook

Tracks your business expenses as they happen, as well as your income. Users can use app to do invoicing, accept payments, manage their cash flow, maximize tax deductions, track travel miles, run reports, send estimates, manage bills and 1099 contractors, plus pay employees.

Accessible from any web browser and also offered in both the App Store (for iOS) and on Google Play (for Android).

Bank and credit cards, plus third-party apps like PayPal and Square. Free to use for creating 20 envelopes, one account user on up to two devices, one year of transaction history, debt tracking and community support.

Pros:

- Automatically track mileage and snap pictures of receipts.
- Send and track invoices in multiple currencies.
- Link bank and credit card accounts.

Cons:

• One of the more expensive expense tracker apps.

• E-signature is available only on the app.

• No chat support.

5. Everlance:

Mr.Michael Preysman

With Everlance, create an IRS-compliant mileage log and sync your bank accounts and credit cards for expense and receipt tracking. This app is particularly popular with those who are self-employed.

Everlance uses GPS technology to automatically chart your trips. However, you can also turn that feature off and manually track trips. While the app does advertise you can set it and forget it, user reviews suggest it's best to double-check your trip is recorded, as GPS errors have caused the app to miss some trips.

Pros:

• GPS used to create an IRS-compliant mileage log.

• Syncs to bank or credit card for expenses and receipts.

Cons:

• Premium features cost far more than other expense tracker apps.

• Notifications are cumbersome if manually tracking trips.

6. Nerdwallet:

Mr.Tim Chen

Mr.Jacob Gibson

If you want to get a handle on your personal finances for free, download the NerdWallet app. With it, you can see all of your accounts and their transactions in one place, keep tabs on your credit and net worth, and get helpful reports on your cash flow.

Link your accounts and categorize your transactions to get a picture of how you spend your money every month. From there, set goals to help pay down debt, invest for your future, and save money. The app offers tips based on your own personal situation.

Pros:

- Track income and expenses.
- Monitor your credit and net worth.

Cons:

- Limited transaction management.
- Must link your account to reconcile transactions, rather than it pulling from your credit report.

7. Personal Capital:

Mr.Bill Haris

The best expense tracker app for investors is Personal Capital because you can view all of your investment and bank accounts in one app. It gives investment tools, advice, expense categorization, and helps you stay on top of upcoming bills.

Take advantage of its investment management tools to link accounts, plan for retirement, set a budget, and see your cash flow. Each of these services is free with the app or its web interface.

Personal Capital is a personal finance and wealth management company founded in 2009. This app is free and gives you a clear snapshot of your financial health.

Pros:

- Reporting tools make it easy to see the asset allocation and performance of your investments.
- Recession simulator shows how your investments would've performed in historical recessions.

Cons:

- No account reconciliation.
- Some financial institutions won't sync with the app.

8. Wally:

Mr.Saeid Hejazi

Wally makes it simple to track your budget by syncing with your accounts, and it allows you to easily manage shared expenses.

Wally is an integrated expense tracker app that provides insights into your spending habits by syncing with your financial accounts. Wally has a big focus on expenses and presents feedback and useful information on your spending, but it also has a social feature for shared expenses. For example, if you share utilities

with a roommate, Wally can track those expenses. Get insights on your spending, set goals, and increase your savings.

Wally centralizes all your accounts so you can learn, manage, and improve your finances.

Pros:

- Basic version is free.
- Ability to set custom budgets.
- Real-time expense tracking.

Cons:

- Only available for iOS.
- Can get expensive.
- May be overwhelming for new users.

9. Ynab:

Mrs.Jesse Mecham

YNAB lets you track where every dollar you make ends up, offering both a detailed and high-level view of your finances.

YNAB stands for You Need a Budget. The folks behind this app worked hard to build an app specifically focused on budgeting and expense tracking. The app takes an uncommon philosophy of budgeting. Users are forced to give a job to every dollar they earn, whether it is related to savings, expenses, or investments, and the app uses that to show user budgets.

The original version allowed for manual expense tracking only, though the newer update allows you to automatically import expenses from a linked bank account as well. It isn't perfect for everyone, but if you want to start budgeting and need help getting the process moving, YNAB is likely a good fit for your needs.

Pros:

- Let's you track all your money goals at a glance.
- No ads.

Cons:

- Can get expensive.
- Tracking every dollar may be overwhelming.

10. Myelopes:

Mr.Nich Thomas

Mvelopes takes traditional envelope budgeting digital, helping you organize your monthly spending more easily.

Most budgeting and expense tracking apps are designed to tell you what happened after you spend your money. Mvelopes takes a different approach and offers spending forecasts and suggestions to keep you from going overboard on your next visit to the mall, or Amazon, or wherever else you like to spend money.

Envelope budgeting is a style of budgeting that involves literally putting cash in envelopes at the start of the month, and you can spend until your envelopes are empty. Mvelopes takes that experience online, offering users digital envelopes to store their spending money each month.

Pros:

- Offers live chat support.
- Budgeting method is effective.

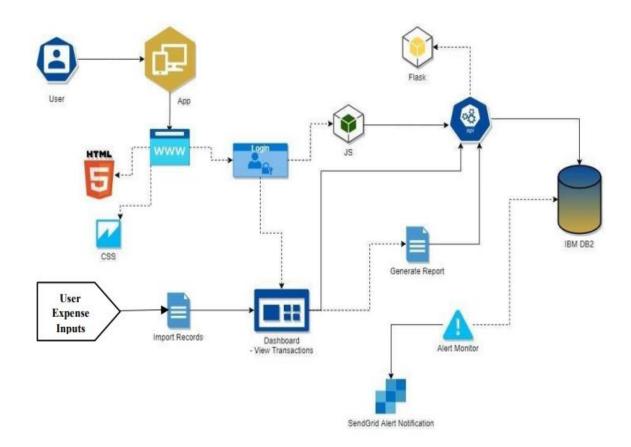
Cons:

- Has a monthly cost.
- No initial setup help with Basic plan.

PROPOSED SYSTEM

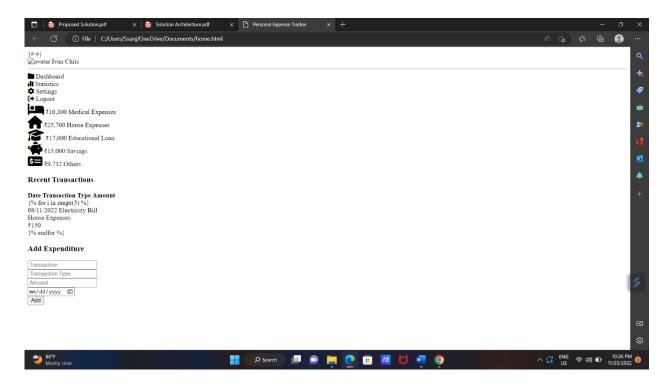
Earlier, our parents use to track all their expenses by writing down in a small notebook and calculating it on their own Even still many of them follow the same to maintain their financial expenses even some of them don't care of their expenses and spendings. Not only in our homes Expenses are need to be tracked in many large scale and small scale sectors such as in many schools, colleges, marketing companies, departmental stores, etc So in order to optimize their work and make peoples life easier our expense tracker application will be much helpful for financial management. The outcome of the application will be much useful for them to acknowledge the daily expenses and track the monthly expenses from their income with a limit to spend. They can easily track and view their expenses with a statistical data. In short, tracking our financial expenses is a great deal especially in this scenario so making those tracking easier is the job of this application. Due to the busy and hectic lifestyle people tend to overlook their budget and end up spending an excessive amount of money since they usually didn't plan their budget wisely. user cannot predict future expenses. While they can write down their expenses in a excel spreadsheet, their lack of knowledge in managing finances will be a problem. This application tracks your every expenses anywhere and anytime without using the paperwork. Just click and enter your expenditure. to avoid data loss, quick settlements and reduce human error. To provide the pie chart or graph lines in this application. Using this application one can track their personal expenses and frame a monthly/annual budget. If your expense exceeded than specified limit, the application will show you an alert message in form of a pie chart. Business people can use subscription/premiumfeature of this application to gain revenue. IBM cloud will automatically allocate the storage for the users.

SYSTEM ARCHITECTURE

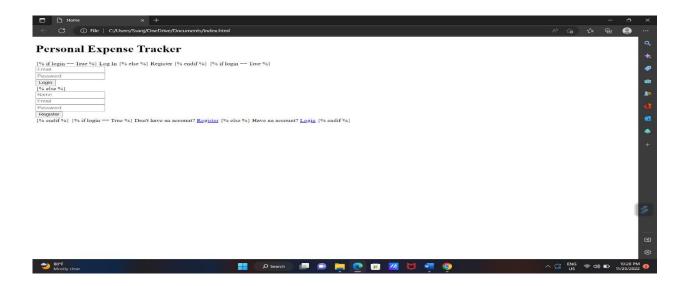


RESULT AND DISCUSSIONS

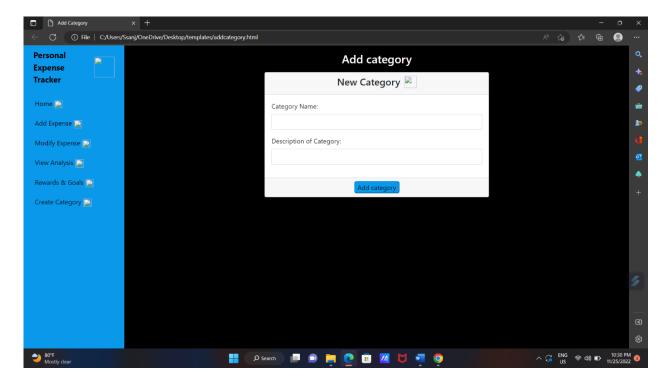
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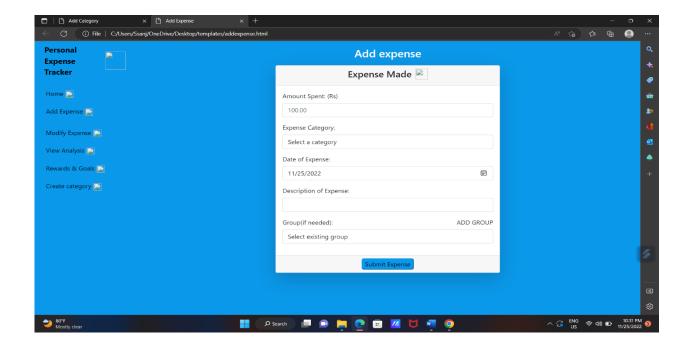
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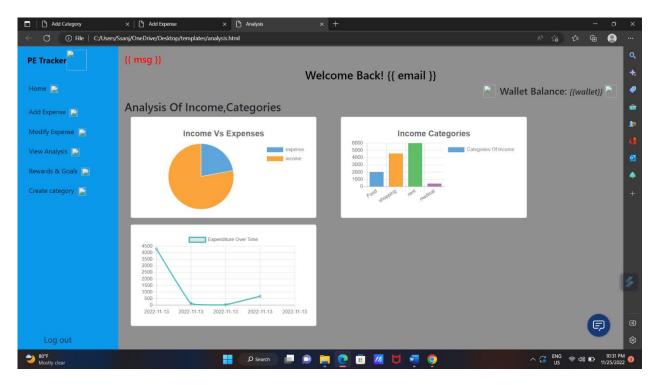
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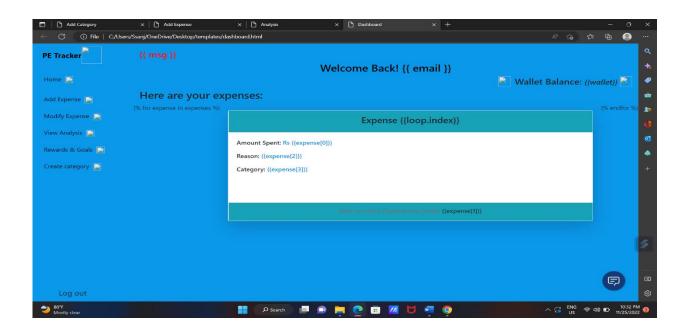
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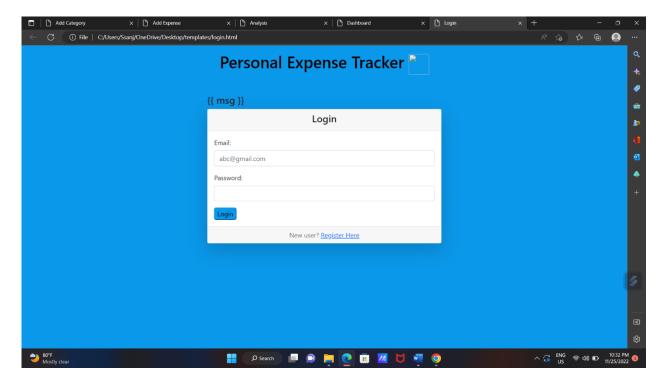
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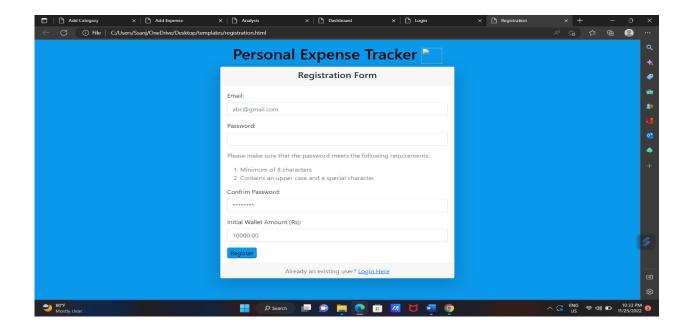
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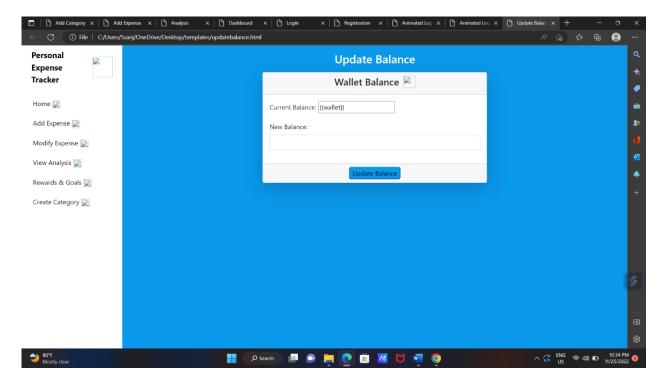
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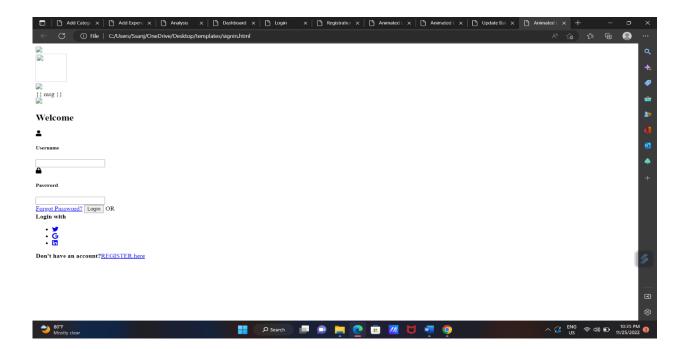
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